MAREY®
HEATER CORP.

ELECTRIC INSTANT WATER HEATER
INSTRUCTIONS MANUAL

ECO110 MODEL

Keep this manual with you after your unit has been installed,
you may need it for further technical information.

DESDE 1955 SINCE

MAREY®
HEATER CORP.

Congratulations!

You've just purchased a new Marey ECO110 tankless water heater and will soon begin to enjoy the benefits of “going tankless.”

Take the time to thoroughly read and understand this safety and installation manual in its entirety before you attempt to install your new ECO110 tankless water heater, as it contains important safety tips andinstructions.

Please carefully read all instructions and warnings. Should you have any questions, please visit **www.marey.com** for installation videos and FAQ.

Please keep this manual for future reference.

INDEX

WARNING 04
INSTALLATION GUIDE 04
INSTALLATION 04
RESTRICTIONS 06
ENERGY SAVING TIPS 07
OTHER POWER REQUIREMENTS 07
QUICK INSTALLATION GUIDE 09
HOW TO USE 09
STEPS TO RESET THE HEATER 11
CUSTOMER SERVICE 12
OTHER PRODUCTS 13

WARNING

If your water heater requires a reset, be sure to TURN OFF THE BREAKER prior to resetting the unit.

Resetting your unit without turning off the breaker can result in personal injury and damage to your water heater.

WARNING! There is water contained in the coils of your water heater at all times. If your water heater is exposed to freezing temperatures, the water in the coils could freeze, causing a break in the heat exchanger of the unit, or the supply and return lines. This kind of damage will result in water running freely into the space where the water heater is located, with can cause flooding. DO NOT install this water heater where it may be subjected to a freeze. If your water heater is in an area where freezing is a possibility, you must turn off the water to the heater and drain it of any water by disconnecting the water lines. Leave the water lines disconnected until you intend to use the water heater.

INSTALLATION GUIDE

IMPORTANT: Working with electricity requires proper skills and knowledge–and work should NOT be performed by someone who is not trained in this trade. We HIGHLY recommend that you solicit the services of a licensed and qualified "Electrician/Plumber"familiarwithtankless water heater installation.

IMPROPER INSTALLATION CAN CAUSE INJURY OR EVEN DEATH.

Absolutely no electrical wiring connections should be made to this unit until the unit has been properly secured to the wall. Absolutely no connections should be made to this unit until all external electrical work has been completed.

INSTALLATION

I) HANGING THE UNIT

- The heater must beinstalled vertically and secured with 3 screws using the"drill hole template" included with this heater.

- Do not connect power or water prior to properly hanging the unit.

-Mark the position of the points of the 3 screws using the template supplied. Note that we re commend leaving 6 inches clearance (free) around the heater, therebyfacilitatingthe proper installation and maintenance.

- Install screws at the marked locations. If you are installing in sheetrock, use the provided wall anchors by drilling a ¼" hole. Install the anchors before installing the screw. Otherwise,directly attach screws to studs.

-Hang the heater from the screws using the keyhole brackets on the back of the heater.

II) PLUMBING

Important: Your ECO110 water heater does NOT have a high pressure relief valve. Your heater is intended for use ONLY up to 150 PSI of water pressure. When water pressures may exceed 150 PSI, you MUST install a pressure relief valve adjacent to the cold water entrance.

The heater should be installed as close as possible to the point of use. The further the hot water has to travel, the higher the likelihood of heatloss.

Do not install in wet areas.

When installed in a location that could freeze the heater must be isolated and drained.

- Stainless steel flexible hose or copper tubing must be used. Do NOT use PVC, CPVC, or other plastic supply lines to connect the unit. The copper or steel must run a minimum of 16" from the heater before any other type of tubing or pipe can be used.

- Your unit comes prefitted with a 1/2" NPT adapter. Connect 1/2" stainless steel hose or ½" threaded copper to connect to the unit. (Cold water inlet is on the right side of the unit, hot water outlet is on the left.)

-You must use an isolation valve at the inlet pipe of the unit, to allow the water to the unit to be shut off without turning off water to the whole house. Connect the isolation valve at the entry inlet pipe of the heater and make sure you install a rubber washer. Do not apply excessive force to tighten connectors.

-Flush the water lines with water to clear any debris or impurities before attaching to the unit.

-Any residue or dirt in the pipes may cause internal damage to the unit. We recommend installing a sediment filter before the entry of water to the heater. Hard water or water with high levels of minerals and alkali can cause damage to this unit. When this is the case, we recommend the use of a (non-salt) water softening system.

-Check for water leaks and correct as necessary before applying power to the unit.

III) ELECTRICITY

- Install a 50 Amp GFCI fuse box or switch ("breaker") for exclusive use of the heater. Wire size will vary based on distance, but this unit will require a MINIMUM size of 8 AWG wire.

IMPORTANT: THE BREAKER MUST BE GFCI. THE UNIT DOES NOT HAVE AN INTERNAL GFCI CONTROL! FAILURE TO USE A GFCI BREAKER CAN RESULT IN INJURY OR DEATH.

-Connect the ground, as indicated in the Electrical Code.

-Allow water to flow through the unit for several minutes before applying power to unit. Identify and correct leaks as necessary.

- **IMPORTANT:** The internal heating coils are submerged in a small reservoir inside your heater. These tanks MUST be full of water before applying power for proper function. If the water supply is ever disconnected from the unit, ALWAYS run the water with the faucet fully open for one or two minutes prior to reapplying power.

Remember: Run the water before turning on electricity.

NOTE: The electrical supply should never be turned on until installation is complete.

RESTRICTIONS

- DO NOT expose the unit to freezing temperatures. Do not use when cold water input water temperatures exceed 90 degrees F or 32.2 degrees Celsius.

- DO NOT restrict the flow of water entering the unit.

- DO NOT use the unit if water ceases to flow during use.

- If the outer case or cover is loose, your heater will not work correctly. An improperly secured cover can cause injury or electric shock.

- This unit is designed for indoor use only.

NEVER OPERATE THIS HEATER WITHOUT THE COVER!

WARNING: When power is applied, this unit can produce extremely hot water! Take proper safety precautions to avoid being hurt or be burned by water. ALWAYS test water temperature with your hand before showering.

- Ensure that all electrical connections are adequately protected by GFCI to prevent shock, overheating and damage. **IMPORTANT:** The fuse does not give personal protection against electric shock. A single 50 Amp ground fault breaker (GFCI) or a residual current device (RCD) **MUST** be installed on this circuit.

- This unit requires a single dedicated circuit. **NO** other equipment can be on this circuit.

- Turn off the power switch when the unit will be unused for extended periods of time.

- Installation must be performed by a certified electrician.

NOTE: Improper use or installation will void the warranty.

ENERGY SAVING TIPS

- When possible, install the heater in the most central location, nearest to the point of use (where hot water is needed, e.g., shower, faucets, etc.)

- Adjust heater temperature settings (located on the front panel of the heater) to the desired output temperature you desire. Use the lowest comfortable setting for optimal energy savings.

- We recommend that you install the unit under the sink in main bathrooms or utility areas. This will allow for the minimum power consumption and will reduce the possibility of heat loss due to longer pipe runs.

- For additional savings, reduce the water flow valve at the inlet of the heater to the minimum comfortable setting. The slower the flow through the unit, the more heating it's capable of.

OTHER POWER REQUIREMENTS

WARNING! THIS APPLIANCE MUST BE PROPERLY GROUNDED!

1. The heater should only be connected to a supply 208/240VAC.

2. The heater must be connected to its own independent electrical circuit.

3. Confirm that you have sufficient power available to operate the unit prior to installation. Contact your electric company if you aren't sure of your service amperage.

4. The switch must be accessible and clearly identifiable.

5. Do NOT operate the settings or power on the unit with wet hands or while standing in water. Severe injury or death can result. We STRONGLY recommend that the unit be located out of reach of a person who is in the shower or bath.

6. Do NOT hang the unit where it is possible for it to fall into water or where it may be sprayed with water.

7. The unit circuit should be separated from other circuits to prevent arcing.

8. It is essential that the conditions of each installation site are evaluated by a qualified electrician to determine the correct cable size and permissible circuit length.

TECHNICAL SPECIFICATIONS	ECO110
Voltage	220V
Power	11kW
Amperage	44A
Frequency	50Hz - 60Hz
Wire Size	8 AWG
Activation Flow Rate	0.66 GPM
Maximmum Flow Rate	3 GPM
Min. / Max. Water Pressure	8 PSI - 150 PSI
Width x Height x Depth	7.5" x 10.8" x 3.1"
Weight	7 lbs

TEMP. INCREASE PER GPM					
ECO110		1	2	3	4
GPM	1.0	8ºF	23ºF	39ºF	51ºF
	1.25	7ºF	19ºF	33ºF	46ºF
	1.5	7ºF	18ºF	28ºF	41ºF
	2.0	5ºF	14ºF	25ºF	35ºF
	2.5	4ºF	13ºF	23ºF	31ºF
	3.0	-	8ºF	13ºF	17ºF

*Temperature increases listed are based on use of the water heater under optimal conditions with an incoming water temperature of 48ºF. Variable factors such as incorrect or imperfect installation or warmer incoming water temperature may yield different results.

IMPORTANT!

The size of the switch and wire gauge must meet all local, state, provincial and national electrical codes in your area - these are just guidelines that apply to most installations. Some codes require the use of electrical substations for the installation panel, especially when heater is not mounted within line of sight of the main electrical panel. Wiring must be sized to maintain a voltage drop of less than 3% under load.

There are real dangers involved in improper installation of any electrical appliance. Improper installation will void the warranty of your unit. Failure to follow proper installation procedures creates a risk of injury or death.

Local Codes: Most counties, cities and states have specific local codes governing the installation of electrical equipment. You MUST to know the code and permit requirements in your community before installing your tankless water heater.

QUICK INSTALLATION GUIDE

1. Use a MINIMUM #8 AWG wire for electrical connection. (Or larger depending on distance; see above for additional details).

2. CAUTION: Verify that the cables are tight.

3. Use the illustrated cardboard template to identify the location of the mounting screws.

4. Install screws (with wall anchors if a stud is not available) in the marked locations. Hang the unit from the screws using the keyhole brackets on the back of the heater.

5. Install the ½" NPT connections for the cold and hot water. Use stainless steel tubing or copper for at least 16" from the unit before adapting to PVC, CPVC, or other plastic based material.

IMPORTANT: Avoid water spillage. If any water spillage occurs, dry completely before applying power!

6. Open the water inlet valve of the heater. Check for and correct as necessary ANY water leaks.

7. Allow water to run with the tap fully open for several minutes before connecting power.

8. Connect power.

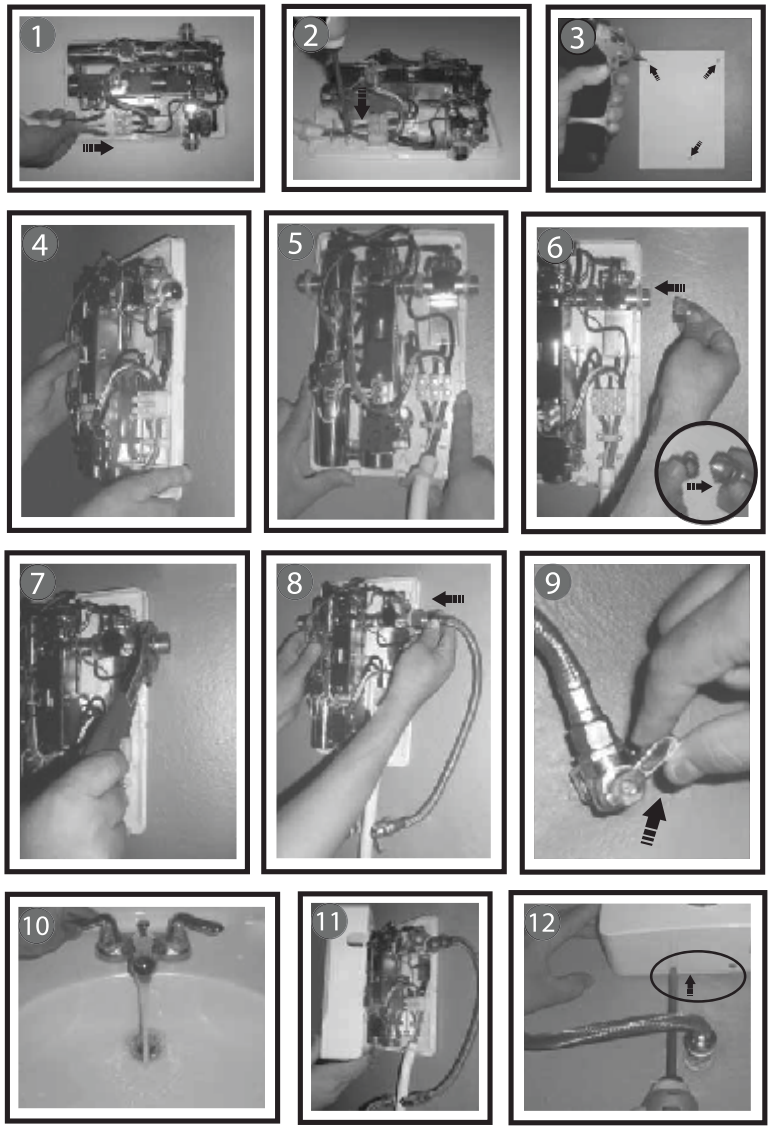
HOW TO USE

- Open the hot water tap and the tankless hot water heater will activate and begin producing hot water.

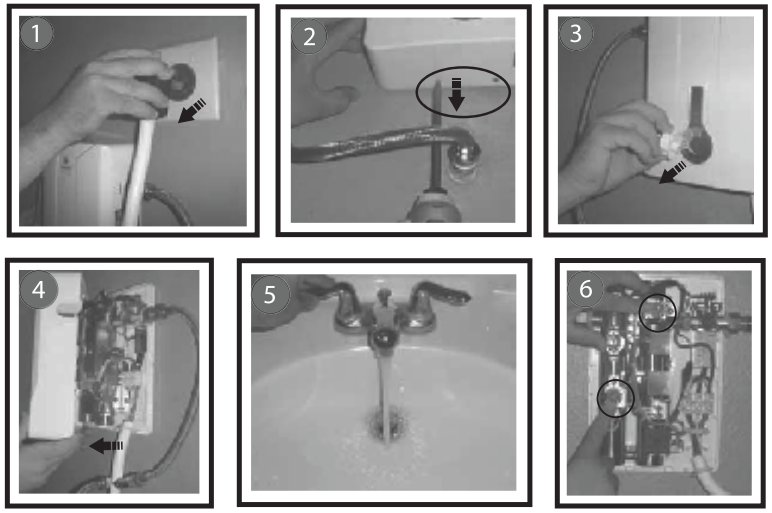
-Test temperature with your hand before use. Mix hot with cold water to achieve the desired output temperature.

- The speed of water passing through the unit will determine the amount of temperature increase (for example, slowing the flow of water will increase the temperature. A faster flow will result in a lower output temperature.) If you would like the water to be hotter, slow down the flow through the unit with the isolation valve. If you would like the water to be colder, open the valve to allow maximum water flow.

- In cooler regions or cooler seasons, the incoming water temperature can cause a variation in the output temperature. The temperature settings on the unit allow you to compensate for flow variations and seasonal changes.



STEPS TO RESET THE HEATER



Warning: If your water heater requires a reset, be sure to TURN OFF THE BREAKER prior to resetting the unit.

Resetting your unit without turning off the breaker can result in personal injury and damage to your water heater.

1. Disconnect power to the unit.

2. Unscrew the two screws that are at the bottom of the unit and which hold the cover on.

3. Remove the temperature controller knob.

4. Remove the cover carefully.

5. Open the hot water tap and let the water run about 10 seconds.

6. Tighten the two buttons indicated in the illustration (see Figure 6) and press each one until it clicks.

7. Replace the cover and temperature controller knob.

CUSTOMER SERVICE

At Marey, we pride ourselves on the excellence of our customer service and support team.

Please feel free to contact us if you have any questions about our products, warranty service, or if you need assistance installing a unit. We also strive for continuous improvement, so we welcome your comments, feedback and suggestions.

1-855-MAREY-55
customerservice@marey.com

OTHER PRODUCTS

Marey proudly manufactures water heaters and accessories for use in almost any application. Please visit our website to learn more about other Marey products.

ECO110

POWER PAK

SANTON

AQUAMATIC

GAS PORTABLE

POWER GAS

ISO 9001
BSMI

Delbrey Street, 211
San Juan, Puerto Rico
00912
Tel: 1-512-332-2229
Toll Free: 1-855-627-3955
1-855-MAREY-55

www.marey.com